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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/645,720	08/20/2003	Steven R. Mead	1-29092	8169
4859 7590 02/25/2008 MACMILLAN SOBANSKI & TODD, LLC ONE MARITIME PLAZA FIFTH FLOOR 720 WATER STREET TOLEDO, OH 43604-1619				
EXAMINER				
LAUX, JESSICA L				
ART UNIT		PAPER NUMBER		
3635				
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02/25/2008		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/645,720

Applicant(s)

MEAD, STEVEN R.

Examiner

Jessica Laux

Art Unit

3635

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16, 19-32, 34-40 and 42-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16, 19-32, 34-40 and 42-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This action is in response to the RCE filed 12/12/2007

Response to Amendment

The declaration under 37 CFR 1.132 filed 12/12/2007 is insufficient to overcome the rejection of the claims as set forth in the last Office action because:

Affiant states in paragraph 7 that "*people* were skeptical that this product would work...[saying] it was too expensive, would not hold up, would not properly support the overlying floor, and would not be easy to install." (emphasis added). However, this statement fails to establish that *experts*, not merely lay people, as implied in paragraph 7, were skeptical. See MPEP 716.05, "The skepticism of an expert, expressed before these inventors proved him wrong, is entitled to fair evidentiary weight, . . . as are the five to six years of research that preceded the claimed invention." *In re Dow Chemical Co.*, 837 F.2d 469, 5 USPQ2d 1529 (Fed. Cir. 1988); *Burlington Industries Inc. v. Quigg*, 822 F.2d 1581, 3 USPQ2d 1436 (Fed. Cir. 1987) (testimony that the invention met with initial incredulity and skepticism of experts was sufficient to rebut the *prima facie* case of obviousness based on the prior art). Because affiant has not shown skepticism of experts the conclusory opinion evidence has been given little persuasive weight of nonobviousness.

Affiant asserts commercial success as evidence of nonobviousness in paragraphs 10-13 and 22. An applicant who is asserting commercial success to support its contention of nonobviousness bears the burden of proof of establishing a nexus between the claimed invention and evidence of commercial success. (MPEP

716.03). In considering evidence of commercial success, care should be taken to determine that the commercial success alleged is *directly derived from the invention claimed*, in a marketplace where the consumer is free to choose on the basis of objective principles, and that *such success is not the result of heavy promotion or advertising*, shift in advertising, consumption by purchasers normally tied to applicant or assignee, or *other business events extraneous to the merits of the claimed invention, etc.* (emphasis added) *In re Mageli*, 470 F.2d 1380, 176 USPQ 305 (CCPA 1973) (conclusory statements or opinions that increased sales were due to the merits of the invention are entitled to little weight); *In re Noznick*, 478 F.2d 1260, 178 USPQ 43 (CCPA 1973). (MPEP 716.03(b)). Here the affiant has merely made conclusory statements that the increased sales were due to the merits of the invention and therefore the statements have been given little persuasive weight of nonobviousness. The affiant asserts that demand for the product exceeded expectations, there was a 10-fold increase in sales over 2 years, and the growth of their market share is at the expense of the conventional products (paragraphs 10 and 11). However, affiant also states, in paragraph 12, that their largest client will offer a LIFETIME warranty on the floor if using the disclosed system, which is “unparalleled in the industry”. Certainly the fact that the client offers such an “unparalleled” warranty affects the commercial success of the product substantially and constitutes a business event extraneous to the merits of the claimed invention. Furthermore, such a warranty can certainly be regarded as a means of advertising not previously accounted for. Moreover, although affiant asserts that he does not advertise this product, there is nothing to rebut the

presumption that the client distributing the product does advertise, if by nothing more than warranting the product. By the balance of the evidence, the reasons for the commercial success can not be determined to be solely from the claimed limitations and the secondary evidence of commercial success has been given little persuasive weight accordingly.

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Response to Arguments

Applicant's arguments filed 12/12/2007 have been fully considered but they are not persuasive.

Applicant submits that the polypropylene or polyethylene closed cell foam does not have the inherent properties of "adjacent beads abut one another and other portions of said adjacent beads are spaced from each other to create spaces therebetween...adjacent beads are integrally joined together at abutting portions". Applicant supports this submission by noting that a foam with portions of adjacent beads spaced from each other to create spaces would not possess low permeability to moisture and would not have a dense pore structure. Examiner disagrees noting the property of dense does not mean that there cannot be spaces between the dense objects. further examiner directs applicants attention to US Publication 20050042394 paragraph 0027 where it is disclosed that the closed cell foam having the claimed spaces is waterproof (i.e. low permeability to water). Therefore applicant's arguments regarding Ebert are not persuasive.

Additionally examiner would like to not closed cell foams do in fact have the claimed properties of being comprised of a plurality of discrete beads of substantially elastic, resilient material with portions of adjacent beads abutting one another and other portions of said adjacent beads spaced from each other. Examiner directs applicant's attention to US PG Publication 2005/0042394 to Sawyer et al. and US Patent 6453477 to Bainbridge et al (these publications are intended to be references only and are not included in the rejection statement as presented in the previous office action).

Bainbridge et al discloses in the abstract and Col. 5, lines 4-12, that a closed cell foam is made of resilient elastic discrete beads with claimed spacing and adjoining features. Sawyer discloses in the abstract and paragraphs 0026-0027 that a closed cell foam has spaced between adjacent beads and where portions of adjacent bead about one another. In view of these references showing that the claimed features are indeed properties of a closed cell foam, applicant's arguments are not persuasive and the rejection is maintained.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1-12, 19-32, 34-38, 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finley et al (5578363) in view of Ebert (4464428).

Regarding claims 1 and 19-20, 31-32: Finley discloses a multi-layered flooring composite for use over a subfloor layer, said composite including a substantially horizontal top floor layer of substantially hard material (7), a subfloor layer of substantially hard material (6) and at least one acoustic layer (1) positioned between said top floor layer and said subfloor layer (where said layer includes a foam layer, abstract).

Finley does not expressly disclose the characteristic of the foam layer. Ebert al. discloses a closed cell foamed material, of polypropylene or polyethylene, useful in the building construction industry for sound attenuation (col. 1, line 22 and col. 3, line 52-53) where the claim limitations of "a plurality of discrete beads of substantially elastic, resilient material wherein portions of adjacent beads abut one another and other portions of said adjacent beads are spaced from each other to create spaces therebetween and wherein substantially all of said adjacent beads are integrally joined together at the abutting portions thereof" are inherent properties of a closed cell foam. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the insulating foam layer of Finley to be as disclosed by Ebert as it is well known in the art to use closed cell foam layers in building construction for the purposes of insulation and sound attenuation (as disclosed by Ebert).

Regarding claims 2-12, 22-23, 35-38: The limitations of claims 2-12 relating to the shape and location (including spaces) of the beads are merely limitations inherent to

any of the various designs and constructions of a closed cell foam, as already known in the art. Further absent any criticality regarding the specific limitations of the claimed features, it appears to be mere design choice, obvious to one of ordinary skill in the art, which fails to patentably distinguish over the prior art, to use a closed foam containing the claimed characteristics as either foam would perform the function of sound attenuation.

Regarding claim 21: The flooring composite of claim where the density of the acoustic layer is about 2-10 pounds per cubic foot (col. 4, line 65; where 70 kg/m³ is approximately 4 pounds per cubic foot).

Regarding claims 24-26: Finley in view of Ebert disclose the flooring composite as above, but do not expressly that the thickness is 1/8 inch or that the diameters are 1/8 inch, the same, or 1/4 inch. However, applicant has not disclosed that the claimed limitations provide an advantage, solve a problem, or are for a particular purpose. Therefore it appears to be a mere matter of design choice to one of ordinary skill in the art to use a closed foam having the claimed characteristic or those as disclosed by Ebert as one would expect applicant's invention and that of Ebert to perform the same function of sound attenuation equally well considering the properties of a closed foam. Therefor absent and criticality the claimed limitations are anticipated by the prior art.

Regarding claims 27-29, 42-44: Finley in view of Ebert disclose the claimed flooring composite as above, but do not expressly disclose the claimed percentages of beads and air spaces. However applicant has not disclosed that the claimed percentages provide an advantage or are for a particular purpose; furthermore the

percentages appear to be obvious design choices for closed cell foams and one of ordinary skill in the art would be motivated to use any closed cell foam containing the various percentages as such a foam would provide the function of sound attenuation equally well consider the properties of a closed cell foam and specifically that as disclosed by Ebert.

Regarding claims 30, 34: Finley in view of Ebert discloses the flooring composite as in claims 1 and 31 above, but does not expressly disclose that the acoustic layer includes inelastic and elastic beads. Ebert does disclose (col. 3, lines 46-64) that various materials may be used in a foam to affect the elastic qualities of the foam. It therefore would have been obvious to one of ordinary skill in the art to use any of various known materials for closed cell foams to achieve various elastic qualities of the foam for the purposes of sound attenuation. Further absent any criticality disclosed by applicant regarding the claimed elastic qualities, it appears to be mere matter of design choice which fails to patentably distinguish from the prior art.

Claims 13-16, 39-40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finley et al (5578363) in view of Ebert (4464428) and further in view of Fiechtl (6189279).

Regarding claims 13-16, 39-40: Finley in view of Ebert discloses the flooring composite as above, but does not disclose a moisture-proof film. Fiechtl discloses a floor system having a foam sound insulating layer and further including a moisture-proof film layer (18), where the layer is attached to at least some of the beads as it is attached to the foam comprised of the those beads.

The claimed limitations regarding the location of the film layer being between the acoustic layer and the subfloor or above the acoustic layer appear to be mere a mere design choice as applicant has not disclosed that either position provides an advantage, solves a stated problem or is used for a particular purpose, but rather discloses either position be an acceptable position. Therefore absent a showing of criticality, the limitations is anticipated by the prior art as disclosed above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jessica Laux whose telephone number is 571-272-8228. The examiner can normally be reached on Monday thru Thursday, 9:00am to 5:00pm (est).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jeanette E Chapman/
Primary Examiner, Art Unit 3633

/J. L./
Examiner, Art Unit 3635
02/15/2008